

# UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY, DOCKET NO.

 09/803,876
 03/12/01
 PEACHEE

HARNESS, DICKEY & PIERCE, PLC P.O. BOX 828 BLOOMFIELD HILLS MI 48303

ART UNIT PAPER NUMBER

11/02/01

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

	Application No.	Applicant(s)
Office Action Summary	09/803,876	PEACHEE ET AL.
	Examiner	Art Unit
	Julio C. Gonzalez	2834
The MAILING DATE of this communic	cation appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu.  - If the period for reply specified above is less than thirty (30)  - If NO period for reply is specified above, the maximum stat  - Failure to reply within the set or extended period for reply within the set or extended period fo	CATION.  of 37 CFR 1.136(a). In no event, however, may a unication.  of days, a reply within the statutory minimum of thir utory period will apply and will expire SIX (6) MON will, by statute, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  ITHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) file	ed on	
2a) This action is <b>FINAL</b> .	b)⊠ This action is non-final.	
3) Since this application is in condition closed in accordance with the practi		
Disposition of Claims		
4)⊠ Claim(s) <u>1-21</u> is/are pending in the a	pplication.	
4a) Of the above claim(s) is/ard	e withdrawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-21</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restrict	ion and/or election requirement.	
Application Papers		
9) The specification is objected to by the	Examiner.	
10)⊠ The drawing(s) filed on <u>12 March 2001</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.		
Applicant may not request that any obje	• • • • • • • • • • • • • • • • • • • •	• •
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are req		
12) The oath or declaration is objected to	by the Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		2.4424.242
13) Acknowledgment is made of a claim to	for foreign priority under 35 U.S.C.	§ 119(a)-(d) or (t).
a) All b) Some * c) None of:	la constanta de la constanta d	
1. Certified copies of the priority documents have been received.		
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>		
	ational Bureau (PCT Rule 17.2(a)).	-
14) Acknowledgment is made of a claim fo	r domestic priority under 35 U.S.C.	§ 119(e) (to a provisional application).
a) ☐ The translation of the foreign land 15)☐ Acknowledgment is made of a claim for	·	
Attachment(s)		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449) Pa</li> </ol>	O-948) 5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)

Application/Control Number: 09/803,876 Page 2

Art Unit: 2834

#### **DETAILED ACTION**

## **Drawings**

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: wall 34, retainer 66. Correction is required.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 66A (figure 3), 66B (figure 5B). Correction is required.
- 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the insulation layer between the winding wire and the stator segment core disclosed in claim 4 and the central portions that are deformed disclosed in claim 7 and the stack of stator plates as disclosed in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 7, 15 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2834

In claim 7, the core includes lateral slits 50 and 52 and also first and second central portions that are deformed. How are these central portions deformed? Where are the central portions located?

## **Double Patenting**

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-21 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-27 of copending Application No. 09/817559. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Both inventions are related to a switch reluctance machine comprising a stator, rotor, a drive circuit, stack of stator plates, insulation layer between the winding wire and the stator segments, end caps and

Art Unit: 2834

end caps retainers and both inventions use sensor less techniques for determining the position of the rotor.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 9. Claims 1, 5, 8, 9, 13, 16, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Koide et al.

Koide et al discloses a stator 30 including a plurality of spaced stator segment with a stator core and winding wire around the stator; a rotor with a plurality of rotor poles 71, a drive circuit that energizes the winding wire of the stator based on a rotational position of the rotor using sensor less techniques (column 4, lines 41-56).

## Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 09/803,876

Art Unit: 2834

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 11. Claims 2-4, 6, 7, 10-12, 14, 15, 17, 19 and 20 are rejected under 35
- U.S.C. 103(a) as being unpatentable over Koide et al in view of Trago et al.

Koide et al discloses a stator 30 including a plurality of spaced stator segment with a stator core and winding wire around the stator; a rotor with a plurality of rotor poles 71, a drive circuit that energizes the winding wire of the stator based on a rotational position of the rotor using sensor less techniques (column 4, lines 41-56). However, Koide et al does not disclose a stack of stator plates.

On the other hand, Trago et al discloses for the purpose to increase the capacity of the motor to dissipate heat, a stack of stator plates having lateral slits and central portions 69 that are deformed using a punch to hold the stack of stator plates together (see figure 7). Also, there is an insulation layer between the winding wire and the stator segment (see figure 13) and end caps with end cap retainer for holding the winding wire (see figure 8, 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a motor using sensor less techniques for detecting the position of the rotor as disclosed by Koide et al and to modify the invention by using stack of stator plates for the purpose to increase the capacity of the motor to dissipate heat as disclosed by Trago et al.

Page 6

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

October 23, 2001

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